INDEX TO VOLUME 91

INDEX TO SUBJECTS

PAGE

Atmospheric Absorption of Infrared Solar Radiation at the Lowell Observatory. II. The Spectral Interval: 5.5–8 μ. *Arthur Adel and C. O. Lampland* 1

Atmospheric Absorption of Infrared Solar Radiation at the Lowell Observatory. III and IV. The Spectral Intervals: 8.0–11.0 μ and 11.0–14.0 μ. *Arthur Adel and C. O. Lampland* 481

B stars, The Colors of 1332. *Joel Stebbins, C. M. Huffer, and A. E. Whitford* 20

Balmer Absorption upon the Equivalent Widths of Stellar Absorption Lines, The Effect of Continuous. *Otto Struve and Frances Sherman* . 428

Balmer Lines in Early-Type Stars, On the Number of. *A. Unsöld and O. Struve* 365

Binary Stars, New White Dwarfs, Subdwarfs, and. *G. P. Kuiper* . . 269

CH Bands in Comet Spectra. *J. Dufay* 91

Cluster M 67, Proper Motions in the Galactic. *E. G. Ebbighausen* . . 244

Clusters, Galactic Star. *Robert J. Trumpler* 186

Clusters, Integrated Photographic Magnitudes of Sixty-eight Globular. *William H. Christie* 8

Comet Spectra, *CH* Bands in. *J. Dufay* 91

Comets, On the Evolution of. *Herbert Jehle* 473

Contraterrene Matter, The Hypothesis of the Existence of. *V. Rojansky* 257

Cosmic Static. *Grote Reber* 621

Cosmological Theories. *E. A. Milne* 129

Dreyer's Catalogues of Nebulae and Clusters, Some Corrections to. *Dorothy Carlson* 350

Erratum. *S. Chapman* 368

f-Values by the Method of Total Absorption, Absolute. *Robert B. King and Donald C. Stockbarger* 488

Galactic System and the Elliptical Nebulae NGC 3115 and 4494, Some Problems concerning the Structure and Dynamics of the. *J. H. Oort* 273

PAGE

$H\gamma$ in A-Type Stars, The Contours of. *C. J. Krieger* 476

Helium Levels, Metastability of Hydrogen and. *G. Breit and E. Teller* . 215

Helium in the Orion Nebula, Relative Populations of 2^1S and 2^3S States of. *O. C. Wilson* 360

Hydrogen and Helium Levels, Metastability of. *G. Breit and E. Teller* . 215

Interstellar Radiation from Free Electrons and Hydrogen Atoms. *L. G. Henyey and Philip C. Keenan* 625

Luminosities of Stars of Types G and K in Two Selected Fields, Spectroscopic. *Philip C. Keenan* 506

M−S Differentiation, On the Physical Significance of the. *Karl Wurm* . 103

Magnitudes of Sixty-eight Globular Clusters, Integrated Photographic. *William H. Christie* 8

Meteor Spectrum of High Excitation, A. *A. N. Vyssotsky* 264

Microfilm Sets of Periodicals 368

Moon, Radiation Measurements on the Eclipsed. *Edison Pettit* 408

Nebulae. IX. On the Excitation of Fractional Multiplets by Electron Capture, Physical Processes in Gaseous. *George H. Shortley and Donald H. Menzel* 307

Nebulae and Clusters, Some Corrections to Dreyer's Catalogues of. *Dorothy Carlson* 350

Nebulae in Messier 101, Emission. *Carl K. Seyfert* 261

Nebulae NGC 3115 and 4494, Some Problems concerning the Structure and Dynamics of the Galactic System and the Elliptical. *J. H. Oort* . 273

Negative Hydrogen Ions, The Continuous Absorption of Light by. *H. S. W. Massey and D. R. Bates* 202

North Polar Sequence, Spectral Types of Stars of the. *Philip C. Keenan* 113

Novae, The Relation between Absorption Velocity and Rate of Decline for Galactic. *Dean B. McLaughlin* 369

Orion Nebula, Relative Populations of 2^1S and 2^3S States of Helium in the. *O. C. Wilson* 360

25 Orionis, 1933–1939, The Spectrum of. *Helen W. Dodson* 126

Parallaxes with the 60- and 100-Inch Reflectors. Seventeenth Series, The Photographic Determination of Stellar. *Adriaan van Maanen* . . . 503

Prominences, The Motion of Eruptive. *R. G. Giovanelli* 83

PAGE

Reviews:
Albright, John G. *Physical Meteorology* 368
Boyer, Carl B. *The Concepts of the Calculus* 368
Gatterer, A., and J. Junkes. *Atlas der Restlinien von 30 chemischen Elementen* (G. Abetti) 479
Kayser, H., and R. Ritschl. *Tabelle der Hauptlinien der Linienspektren aller Elemente* (O. Struve) 367
Stumpff, K. *Tafeln und Aufgaben zur harmonischen Analyse und Periodogrammrechnung* 367

Ross 22, Note on. *G. P. Kuiper* 366

Rowland Intensity Scale, An Investigation of the. *Donald H. Menzel, Leo Goldberg, and Edward M. Cook* 320

v Sagittarii, The Spectrum of. *Jesse L. Greenstein* 438

Solar Eclipse, The General Illumination during a Total. *John Q. Stewart and C. D. MacCracken* 51

Solar Eruptions. *R. G. Giovanelli* 334

Solar Radiation at the Lowell Observatory. II. The Spectral Interval: 5.5–8 μ, Atmospheric Absorption of the Infrared. *Arthur Adel and C. O. Lampland* 1

Solar Radiation at the Lowell Observatory. III and IV. The Spectral Intervals: 8.0–11.0 μ and 11.0–14.0 μ, Atmospheric Absorption of Infrared. *Arthur Adel and C. O. Lampland* 481

Solar Reversing Layer from *CN* (λ 3883), The Excitation Temperature of the. *Leon Blitzer* 421

Spectral Energy-Curve of the Sun in the Ultraviolet. *Edison Pettit* . . 159

Spectral Types of Stars of the North Polar Sequence. *Philip C. Keenan* 113

Spirals, The Distribution of Color in. *Carl K. Seyfert* 528

Stars of Large Proper Motion, Magnitudes and Colors of. *Carl K. Seyfert* 117

Stars, Spectrographic Observations of Peculiar. *P. Swings and O. Struve* 546

Stars of Types G and K in Two Selected Fields, Spectroscopic Luminosities of. *Philip C. Keenan* 506

Stellar Absorption Lines, The Effect of Continuous Balmer Absorption upon the Equivalent Widths of. *Otto Struve and Frances Sherman* . 428

Sun, Note on the Point-Convective Model for the. *R. E. Marshak* . . 362

Sun in the Ultraviolet, Spectral Energy-Curve of the. *Edison Pettit* . . 159

PAGE

Sunspot Variations. II. The Mathematical Characteristics of. *John Q. Stewart and Forrest C. Eggleston* 72

Thomas-Fermi Method as Applied to Stars, The Generalized. *R. E. Marshak and H. A. Bethe* 239

Venus, Note on the Surface Temperature of. *Rupert Wildt* 266

White Dwarfs, Subdwarfs, and Binary Stars, New. *G. P. Kuiper* 269

Wolf-Rayet Spectroscopic Binary HD 193576, The. *O. C. Wilson* . . . 379

Wolf-Rayet Stars, Physical Characteristics of the. *O. C. Wilson* 394

INDEX OF AUTHORS

PAGE

ABETTI, G. Review of: *Atlas der Restlinien von 30 chemischen Elementen.* A. Gatterer and J. Junkes 479

ADEL, ARTHUR, and C. O. LAMPLAND. Atmospheric Absorption of Infrared Solar Radiation at the Lowell Observatory. II. The Spectral Interval: 5.5–8 μ 1

ADEL, ARTHUR, and C. O. LAMPLAND. Atmospheric Absorption of Infrared Solar Radiation at the Lowell Observatory. III and IV. The Spectral Intervals: 8.0–11.0 μ and 11.0–14.0 μ 481

BATES, D. R., and H. S. W. MASSEY. The Continuous Absorption of Light by Negative Hydrogen Ions 202

BETHE, H. A., and R. E. MARSHAK. The Generalized Thomas-Fermi Method as Applied to Stars 239

BLITZER, LEON. The Excitation Temperature of the Solar Reversing Layer from *CN* (λ 3883) 421

BREIT, G., and E. TELLER. Metastability of Hydrogen and Helium Levels 215

CARLSON, DOROTHY. Some Corrections to Dreyer's Catalogues of Nebulae and Clusters 350

CHAPMAN, S. Erratum 368

CHRISTIE, WILLIAM H. Integrated Photographic Magnitudes of Sixty-eight Globular Clusters 8

COOK, EDWARD M., DONALD H. MENZEL, and LEO GOLDBERG. An Investigation of the Rowland Intensity Scale 320

DODSON, HELEN W. The Spectrum of 25 Orionis, 1933–1939 126

DUFAY, J. *CH* Bands in Comet Spectra 91

EBBIGHAUSEN, E. G. Proper Motions in the Galactic Cluster M 67 . . 244

EGGLESTON, FORREST C., and JOHN Q. STEWART. The Mathematical Characteristics of Sunspot Variations. II. 72

GIOVANELLI, R. G. The Motion of Eruptive Prominences 83

GIOVANELLI, R. G. Solar Eruptions 334

GOLDBERG, LEO, EDWARD M. COOK, and DONALD H. MENZEL. An Investigation of the Rowland Intensity Scale 320

GREENSTEIN, JESSE L. The Spectrum of υ Sagittarii 438

PAGE

HENYEY, L. G., and PHILIP C. KEENAN. Interstellar Radiation from Free Electrons and Hydrogen Atoms 625

HUFFER, C. M., A. E. WHITFORD, and JOEL STEBBINS. The Colors of 1332 B Stars 20

JEHLE, HERBERT. On the Evolution of Comets 473

KEENAN, PHILIP C. Spectral Types of Stars of the North Polar Sequence 113

KEENAN, PHILIP C. Spectroscopic Luminosities of Stars of Types G and K in Two Selected Fields 506

KEENAN, PHILIP C., and L. G. HENYEY. Interstellar Radiation from Free Electrons and Hydrogen Atoms 625

KING, ROBERT B., and DONALD C. STOCKBARGER. Absolute *f*-Values by the Method of Total Absorption 488

KRIEGER, C. J. The Contours of $H\gamma$ in A-Type Stars 476

KUIPER, G. P. New White Dwarfs, Subdwarfs, and Binary Stars . . 269

KUIPER, G. P. Note on Ross 22 366

LAMPLAND, C. O., and ARTHUR ADEL. Atmospheric Absorption of Infrared Solar Radiation at the Lowell Observatory. II. The Spectral Interval: 5.5–8 μ 1

LAMPLAND, C. O., and ARTHUR ADEL. Atmospheric Absorption of Infrared Solar Radiation at the Lowell Observatory. III and IV. The Spectral Intervals: 8.0–11.0 μ and 11.0–14.0 μ 481

MACCRACKEN, C. D., and JOHN Q. STEWART. The General Illumination during a Total Solar Eclipse 51

MCLAUGHLIN, DEAN B. The Relation between Absorption Velocity and Rate of Decline for Galactic Novae 369

MARSHAK, R. E. Note on the Point-Convective Model for the Sun . . 362

MARSHAK, R. E., and H. A. BETHE. The Generalized Thomas-Fermi Method as Applied to Stars 239

MASSEY, H. S. W., and D. R. BATES. The Continuous Absorption of Light by Negative Hydrogen Ions 202

MENZEL, DONALD H., LEO GOLDBERG, and EDWARD M. COOK. An Investigation of the Rowland Intensity Scale 320

MENZEL, DONALD H., and GEORGE H. SHORTLEY. Physical Processes in Gaseous Nebulae. IX. On the Excitation of Fractional Multiplets by Electron Capture 307

MILNE, E. A. Cosmological Theories 129

PAGE

OORT, J. H. Some Problems concerning the Structure and Dynamics of the Galactic System and the Elliptical Nebulae NGC 3115 and 4494 . 273

PETTIT, EDISON. Radiation Measurements on the Eclipsed Moon . . 408

PETTIT, EDISON. Spectral Energy-Curve of the Sun in the Ultraviolet . 159

REBER, GROTE. Cosmic Static 621

ROJANSKY, V. The Hypothesis of the Existence of Contraterrene Matter 257

SEYFERT, CARL K. The Distribution of Color in Spirals 528

SEYFERT, CARL K. Emission Nebulae in Messier 101 261

SEYFERT, CARL K. Magnitudes and Colors of Stars of Large Proper Motion 117

SHERMAN, FRANCES, and OTTO STRUVE. The Effect of Continuous Balmer Absorption upon the Equivalent Widths of Stellar Absorption Lines . 428

SHORTLEY, GEORGE H., and DONALD H. MENZEL. Physical Processes in Gaseous Nebulae. IX. On the Excitation of Fractional Multiplets by Electron Capture 307

STEBBINS, JOEL, C. M. HUFFER, and A. E. WHITFORD. The Colors of 1332 B Stars 20

STEWART, JOHN Q., and FORREST C. EGGLESTON. The Mathematical Characteristics of Sunspot Variations. II. 72

STEWART, JOHN Q., and C. D. MACCRACKEN. The General Illumination during a Total Solar Eclipse 51

STOCKBARGER, DONALD C., and ROBERT B. KING. Absolute *f*-Values by the Method of Total Absorption 488

STRUVE, O. Review of: *Tabelle der Hauptlinien der Linienspektren aller Elemente*, H. Kayser and R. Ritschl 367

STRUVE, OTTO, and FRANCES SHERMAN. The Effect of Continuous Balmer Absorption upon the Equivalent Widths of Stellar Absorption Lines 428

STRUVE, O., and P. SWINGS. Spectrographic Observations of Peculiar Stars 546

STRUVE, O., and A. UNSÖLD. On the Number of Balmer Lines in Early-Type Stars 365

SWINGS, P., and O. STRUVE. Spectrographic Observations of Peculiar Stars 546

TELLER, E., and G. BREIT. Metastability of Hydrogen and Helium Levels 215

TRUMPLER, ROBERT J. Galactic Star Clusters 186

PAGE

UNSÖLD, A., and O. STRUVE. On the Number of Balmer Lines in Early-Type Stars 365

VAN MAANEN, ADRIAAN. The Photographic Determination of Stellar Parallaxes with the 60- and 100-Inch Reflectors. Seventeenth Series 503

VYSSOTSKY, A. N. A Meteor Spectrum of High Excitation 264

WHITFORD, A. E., C. M. HUFFER, and JOEL STEBBINS. The Colors of 1332 B Stars 20

WILDT, RUPERT. Note on the Surface Temperature of Venus . . . 266

WILSON, O. C. Physical Characteristics of the Wolf-Rayet Stars . . . 394

WILSON, O. C. Relative Populations of 2^1S and 2^3S States of Helium in the Orion Nebula 360

WILSON, O. C. The Wolf-Rayet Spectroscopic Binary HD 193576 . . 379

WURM, KARL. On the Physical Significance of the M–S Differentiation . 103